

Application No. 10/689,391
Amendment dated November 18, 2005
Reply to Office Action of September 1, 2005

REMARKS

Interview with the Examiner

The Applicant's representative would like to thank Examiner William Dowling for the courtesy extended during the Examiner's Interview conducted on October 19, 2005. The discussion aimed to resolve the fact that the Office Action dated September 1, 2005, did not comment on the status of claims 22 and 23 as being rejected or allowed. Based upon the interview, claim 22 is rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,609,798 to Milinusic et al. ("Milinusic") in view of U.S. Patent No. 6,322,219 B1 to Okamori et al. ("Okamori"), and claim 23 is rejected under 35 U.S.C. §103(a) as being unpatentable over Milinusic in view of Okamori, and in further view of U.S. Patent No. 6,626,542 B2 to Baba et al. ("Baba") or U.S. Patent No. 6,626,541 B2 to Sunaga ("Sunaga"). In addition, Examiner Dowling stated that the rejection of claims 2 and 12 was in error as claims 2 and 12 had been amended previously to depend from allowed claims 3 and 13, respectively.

Status Of Application

Claims 1-25 are pending in the application; the status of the claims is as follows:

Claims 1, 11 and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Milinusic in view of Okamori.

Claims 21 and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Milinusic in view of Okamori as applied to claim 11 above, and further in view of Baba or Sunaga.

Claims 3-10, 13-20, 24 and 25 are allowed.

Copies of the Certified Copies of Japanese Patent Application Nos. 2002-300791 and 2002-300800 were enclosed with the Applicants' Amendment mailed on January 24,

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2005 (filed with the Patent and Trademark Office on January 27, 2005).

Acknowledgement of our claim for foreign priority under 35 U.S.C. § 119 (a)-(d) and receipt of the priority documents is respectfully requested.

Claim Amendments

Claims 1, 11 and 23 have generally been amended to require that each of at least two elements having optical power between the exit surface of the light intensity uniformizing device and the display panel are reflective. Support for these amendments is found in Figs. 1-4 and in corresponding paragraphs [0011] – [0016]. Thus, these changes do not introduce any new matter.

35 U.S.C. § 103(a) Rejections

The rejection of claims 1, 11 and 22 under 35 U.S.C. § 103(a), as being unpatentable over Milinusic in view of Okamori, is respectfully traversed based on the following.

Claim 1 includes the limitation, “wherein, each of at least two elements having an optical power, which is disposed between the exit surface of the light intensity uniformizing device and the display panel, is a reflective surface.” Thus, while elements having no optical power may have either transmissive or reflective surfaces, those elements that have optical power have reflective surfaces. This limitation applies only to those elements between the exit surface of the light intensity uniformizing device and the display panel. Pursuant to this limitation, there must be at least two such reflective elements having optical power between the exit surface of the light intensity uniformizing device and the display panel.

As acknowledged in the Office Action, Milinusic discloses a projection system that has a reflection optical system that is the only element with optical power between a light pipe and an image modulator (disclosed as a digital mirror device in Col. 2, line 37). The

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Office Action further acknowledges that Milinusic fails to disclose using a condenser lens or shaping the light pipe similar to the display panel. The Office Action then alleges that because Okamori discloses these features, it would have been obvious to modify the device of Milinusic to create the device of claim 1. This allegation is respectfully traversed as follows.

Milinusic discloses a single spherical input mirror (element 120) as the only element having optical power between a light pipe (element 110) and a digital mirror device (element 130) (Figs. 1A and 3, Col. 2, lines 32-37), as opposed to the limitation of claim 1 that there be at least two reflective elements having optical power. Therefore, adding the condenser lens and shaping the exit of the light pipe similar to the display panel, as taught in Okamori, would not render obvious claim 1. Thus, the cited references do not show or suggest every limitation of claim 1. To support a *prima facie* case for obviousness, the cited references, alone or in combination, must show or suggest every limitation of the claim. MPEP §2143.03. Therefore, claim 1 is not obvious over the cited references.

Claim 11, like claim 1, includes the limitation “wherein, each of at least two elements having an optical power, which is disposed between the exit surface of the light intensity uniformizing device and the display panel, is a reflective surface.” As noted above, adding the condenser lens and shaping the exit of the light pipe similar to the display panel, as taught in Okamori, to the device of Milinusic would not render obvious claim 1 because Milinusic only discloses one reflective element having optical power between the light pipe and the display panel. As the combination of Milinusic and Okamori does not render obvious claim 1 based on this limitation, claim 11 is nonobvious for at least the same reason.

Claim 22 depends from and contains all the limitations of claim 11 and is therefore allowable for at least the same reasons that claim 11 is allowable.

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Accordingly, it is respectfully requested that the rejection of claims 1, 11 and 22 under 35 U.S.C. § 103(a) as being unpatentable over Milinusic in view of Okamori, be reconsidered and withdrawn.

The rejection of claims 21 and 23 under 35 U.S.C. § 103(a), as being unpatentable over Milinusic in view of Okamori as applied to claim 11 above, and further in view of Baba or Sunaga, is respectfully traversed based on the following.

Claim 21 depends from claim 11. As discussed above, the combination of Milinusic and Okamori fails to render obvious claim 11 due, at least, to the limitation, "wherein, each of at least two elements having an optical power, which is disposed between the exit surface of the light intensity uniformizing device and the display panel, is a reflective surface." While Baba appears to disclose a reflection optical system, it does not disclose the entire optical system between the exit surface of a light intensity uniformizing device and a display panel. Baba discloses only that portion of the optical system from a light valve (element 2) to a screen. As noted in the Office Action, one would substitute projection mirrors for projection lenses. This would result in substituting the reflection optical system (elements 3-5) of Baba for the projection lens means (element 180) of Milinusic. This combined system would still not teach or suggest at least two reflective elements having optical power between a light intensity uniformizing device and a display panel, as required by claim 11. Thus, the cited references do not show or suggest every limitation of claim 11. To support a *prima facie* case for obviousness, the cited references, alone or in combination, must show or suggest every limitation of the claim. MPEP §2143.03. Therefore, claim 11 is not obvious over the cited references. As claim 21 depends from nonobvious claim 11, claim 21 is nonobvious for at least the same reason.

Sunaga, like Baba, discloses a reflection optical system (a series of 6 reflective elements having optical power) between a light valve (element LV) and a screen (element S) as shown in Figs. 1, 2, 6 and 10. As with Baba, combining this reflection optical

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system from Sunaga with Milinusic and Okamori would result in an apparatus that would still only have one reflective element having optical power between a light intensity uniformizing device and a display panel. For this reason, the combination of Milinusic, Okamori, and Sunaga cannot render obvious the invention of claim 11. As claim 21 depends from nonobvious claim 11, claim 21 is nonobvious for at least the same reason.

Claim 23 also includes the limitations that the reflection optical system includes at least two elements and “wherein, each of the at least two elements of the reflection optical system having an optical power, which is disposed between the exit surface of the light intensity uniformizing device and the display panel, is a reflective surface.” As noted above, Baba and Sunaga disclose a reflection optical system between a light valve and a screen. Thus, the combination of either of these references with Milinusic and Okamori still does not teach or suggest each of the at least two elements of the reflection optical system have optical power and a reflective surface between a light intensity uniformizing device and a display panel, as required by claim 23. Thus, the cited references do not show or suggest every limitation of claim 23. Therefore, claim 23 is not obvious over the cited references.

Accordingly, it is respectfully requested that the rejection of claims 21 and 23 under 35 U.S.C. § 103(a) as being unpatentable over Milinusic in view of Okamori as applied to claim 11 above, and further in view of Baba or Sunaga, be reconsidered and withdrawn.

CONCLUSION

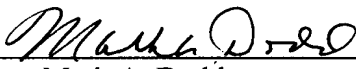
In view of the foregoing, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are respectfully requested.

This Response does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims

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beyond the number of claims originally paid for. Accordingly, no fee based on the number or type of claims is currently due. If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed. Any fee required for such a Petition for Extension of Time or any other fee required by this response, including any fee pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

By: 
Mark A. Dodd
Registration No. 45,729
Attorney for Applicants

MAD/llb:jjk
SIDLEY AUSTIN BROWN & WOOD LLP
717 N. Harwood, Suite 3400
Dallas, Texas 75201
Direct: (214) 981-3481
Main: (214) 981-3300
Facsimile: (214) 981-3400
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